IN THE SPECIFICATION

Please **amend** specification paragraph [0009] as follows:

[0009] In another embodiment of the invention, the antimicrobial peptides are LLP1 analogs having modifications based on the following principles: (i) optimizing amphipathicity, (ii) substituting arginine (Arg) on the charged face and/or valine (Val) or tryptophan (Trp) on the hydrophobic face with another amino acid, and (iii) increasing peptide length (referred to collectively herein as ~~LBU peptides~~Lytic Base Unit peptides (LBU peptides), *e.g.* LBU-2, SEQ ID NO:4; LBU-3, SEQ ID NO:5; LBU-3.5, SEQ ID NO:6; LBU-4, SEQ ID NO:7; WLBU-1, SEQ ID NO:8, WLBU-2, SEQ ID NO:9, WLBU-3, SEQ ID NO:10; and WLBU-4, SEQ ID NO:11; *see* Table 1). The LBU peptides deviate greatly from the parent LLPI, for example, LBU-2 and LBU-3 deviate from the parent LLP1 sequence by greater than 90%.

Please **amend** specification paragraph [0046] as follows:

[0046] Peptide concentration is quantitated using a standard ninhydrin colorimetric assay (*see* Example 1 below). A standard curve using a Leu standard is generated by reading the spectrophotometric

~~absorbence~~absorbance at 570 nm of increasing volumes of the leucine stock combined with the commercially available (Dupont) ninhydrin reagents on a spectrophotometer. The readings of peptide samples are compared to the leucine standard curve to quantitate the amount of peptide in each sample. Alternatively, if the peptide contains Trp in its sequence, peptide concentration can be determined by UV spectroscopy using a molar extinction coefficient ε_{280} = ~~5500^{-1} m·cm^{-1}~~5500 mol^{-1}·cm^{-1}.

Please **amend** specification paragraph [0052] as follows:

[0052] The antimicrobial peptides of the invention display selective toxicity to target microorganisms and minimal toxicity to mammalian cells. Determining the toxicity of the peptides claimed in this invention on mammalian cells is preferably performed using tissue culture assays. For mammalian cells, such assay methods include, *inter alia*, trypan blue exclusion ~~and MTT~~assays and tetrazolium-based colorimetric assays (~~see~~MTT-assay). *See* Moore *et al.*, 1994, *Peptide Research* 7:265-~~269).~~269. Where a specific cell type may release a specific metabolite upon changes in membrane permeability,

that specific metabolite may be assayed, *e.g.*, the release of hemoglobin upon the lysis of red blood cells (*see* Srinivas *et al.*, 1992, *Journal of Biological Chemistry* 267:7121-7127). In addition, the disruption of the transepithelial resistance (Rte) of a cell monolayer that have formed tight junctions can be monitored (*see* Figure 9). The peptides of the invention are preferably tested against primary cells, *e.g.*, using human bronchial epithelial (HBE) cells in polarized culture, or other primary cell cultures routinely used by those skilled in the art. Permanently transformed cell lines may also be used, *e.g.*, Jurkat cells.